



U.S. Army Chemical Materials Agency

End of Stockpile Elimination May 17, 2012

"It's quite an achievement. I know from the Soldier who still has to wear a gas mask it's one less threat that we have to worry about. And I think on a global scale, there's global impact here."

Note: This publication was created to mark the end of stockpile elimination in 2012. The U.S. Army Chemical Materials Agency has since changed charter to U.S. Army Chemical Materials Activity.



"Our achievement demonstrates that diverse people and organizations working together can successfully meet the toughest challenges."

MESSAGE FROM THE ACTING DIRECTOR

The destruction of the last agent munitions in January 2012, made chemical weapons history. The U.S. Army Chemical Materials Agency (CMA) destroyed nearly 90 percent of the Nation's chemical weapons stockpile and fulfilled our Chemical Weapons Convention Treaty requirements. We couldn't have achieved this accomplishment without you—the men and women of CMA. You worked safely and diligently to make this happen. Congratulations!

Thank you for your personal sacrifices and your commitment to excellence. Even though we faced many challenges throughout the years, your dedication remained steadfast and led to this remarkable feat, the destruction of 27, 474 U.S. tons of chemical agent and more than 2.3 million munitions.

Our achievement demonstrates that diverse people and organizations working together can successfully meet the toughest challenges.

All of the sites and headquarters worked together by sharing lessons learned and reaching out to our stakeholders. We knew that our common goal—to destroy the stockpiles at Johnston Island, Maryland, Indiana, Alabama, Arkansas, Oregon and Utah—was challenging, but we forged ahead. Today we are justifiably proud—we made the world safer.

Safety was and will continue to be the cornerstone of CMA. I am proud to say that during destruction operations five sites — Alabama, Arkansas, Indiana, Oregon and Utah — earned the highest safety recognition issued by the U.S. Occupational Safety and Health Administration, the Voluntary Protection Program Star status. CMA's recordable injury rate (RIR) has led the industry and often been on par with occupations such as insurance, finance and real estate. Our Pine Bluff team achieved a perfect RIR of zero in 2010, and the Tooele team recently reached 14 million hours worked without a lost-time accident. These are amazing achievements and well-deserved honors. Our safety record is a result of making safety our top priority; it is the result of each and every one of you making safety an integral part of every aspect of your life and work. Thank you.

But, we didn't do it alone. We collaborated with other Army organizations, government agencies, state and federal regulators, contract partners, emergency responders and international treaty inspectors to complete our mission. Our success is a result of these relationships.

We are continuing with our remaining missions — safely storing stockpiles at Blue Grass Chemical Activity and Pueblo Chemical Depot and continuing our partnership with the Chemical Stockpile Emergency Preparedness Program to protect communities in those states, managing and closing the destruction facilities at Anniston, Pine Bluff, Deseret and Umatilla and assessing and destroying recovered chemical warfare materiel as it is discovered.

I thank each and every one of you who had a role in completing our destruction mission. I know you are proud, just like I am, to be an integral part of making chemical weapons history.

Congratulations on a job well done!

DON E. BARCLAY

Acting Director, U.S. Army Chemical Materials Agency

Jon & Barelay

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Note: This publication was created to mark the end of stockpile elimination in 2012. The U.S. Army

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* CMA storage/Assembled Chemical Weapons Alternatives destruction sites

	COMMANDER	SITE PROJECT MANAGER
1 ABERDEEN Edgewood, Maryland	Col. Gerald Gladney, 2002 - 2005	Joe Lovrich, 2002-2005
2 ANNISTON Anniston, Alabama	Lt. Col. Willie Flucker, 2010-Present	Timothy Garrett, 2000-Present
3 JOHNSTON ATOLL	Col. Stephen Brooks, 2000-2001	Gary McCloskey, 1990-2003
4 NEWPORT Newport, Indiana	Lt. Col. William Hibner, 2008-2010	Jeffrey Brubaker, 2003-2009
5 PINE BLUFF Pine Bluff, Arkansas	Lt. Col. Nathaniel Farmer, 2009-2011	Mark Greer, 2007-Present
6 DESERET Tooele, Utah	Col. Mark Pomeroy, 2010-Present	Thaddeus Ryba, 2004-Present
7 UMATILLA Umatilla, Oregon	Lt. Col. Kris Perkins, 2009-Present	Gary Anderson, 2010-Present
8 BLUE GRASS* Blue Grass, Kentucky	Lt. Col. Steven Basso, 2010-Present	
9 PUEBLO* Pueblo, Colorado	Lt. Col. Timothy Greenhaw, 2011-Present	

CHEMICAL STOCKPILE ELIMINATION PROJECT

ABERDEEN PROVING GROUND, MARYLAND

Since 1941, the Army safely stored approximately five percent of the Nation's original chemical agent in steel ton containers at the Edgewood Area of Aberdeen Proving Ground. The stockpile consisted of chemical blister agent (HD). Destruction operations were completed in February 2006, using neutralization.

ANNISTON, ALABAMA

Since the early 1960s, the Army safely stored approximately seven percent of the Nation's original chemical weapons stockpile at the Anniston Army Depot. The chemical weapons stored at the depot contained GB or VX nerve agents or blister agents (HD and HT). The site completed destruction of blister agent using incineration in September 2011, marking the complete destruction of the depot stockpile.

JOHNSTON ATOLL

The Johnston Atoll Chemical Agent Disposal System served as the Army's first full-scale chemical weapons disposal facility, destroying more than four million pounds of nerve agents, GB and VX, as well as blister agent (HD), using high-temperature incineration technology. Chemical agents contained in 412,798 munitions, including projectiles, rockets, bombs and ton containers, were eliminated in November 2000, reducing the overall U.S. original chemical weapons stockpile by six percent.

NEWPORT, INDIANA

The Newport Chemical Depot opened in 1941. From 1961 to 1968, the site produced U.S. nerve agent, VX. Only one chemical—nerve agent VX and approximately four percent of the Nation's original chemical agent—was ever stockpiled at the depot. Agent destruction operations were completed in August 2008, using neutralization.

PINE BLUFF, ARKANSAS

The Army safely stored approximately 12 percent of the Nation's original chemical weapons stockpile at the Pine Bluff Arsenal. The arsenal's chemical weapons stockpile consisted of various munitions and ton containers, containing GB or VX nerve agents or blister agent (HD). Destruction operations were completed in November 2010, using high-temperature incineration technology.

DESERET, UTAH

The Army safely stored approximately 43 percent of the Nation's original chemical weapons stockpile at the Deseret Chemical Depot since 1942. The weapons originally stored at the depot consisted of various munitions and ton containers, containing GB, GA and VX nerve agents or blister agents (H, HD, HT and Lewisite). The last chemical agent munitions at the depot were safely destroyed in January 2012, using high-temperature incineration technology.

UMATILLA, OREGON

The Army safely stored approximately 12 percent of the Nation's original chemical weapons stockpile at the Umatilla Chemical Depot, starting in 1962. The chemical weapons stored at the depot consisted of various munitions and ton containers containing GB or VX nerve agents or blister agent (HD). Stockpile disposal operations were successfully concluded in October 2011, using high-temperature incineration technology.

CMA STORAGE OPERATIONS

BLUE GRASS, KENTUCKY

The Blue Grass Chemical Activity is responsible for the safe, secure storage of the chemical weapons stockpile stored at the Blue Grass Army Depot, which comprises 523 tons of nerve agents GB and VX, and blister agent (HD) in projectiles, warheads and rockets. The depot stores a stockpile of chemical weapons comprising approximately two percent of the Nation's original chemical weapons stockpile.*

PUEBLO, COLORADO

The Pueblo Chemical Depot stores approximately nine percent of the Nation's original chemical weapons stockpile, which is approximately 2.611 tons of blister agents (HD and HT).*

*The Program Executive Office-Assembled Chemical Weapons Alternatives is responsible for the safe destruction in Kentucky and Colorado.

HEADQUARTERS LEADERSHIP



MR. CONRAD F. WHYNE*

Program Executive Officer,
Assembled Chemical Weapons Alternatives
Former Director,
U.S. Army Chemical Materials Agency



COL. DARRYL BRIGGS
Director of Stockpile Operations,
U.S. Army Chemical Materials Agency



MR. DON E. BARCLAY
Acting Director,
U.S. Army Chemical Materials Agency



Project Manager, Non-Stockpile Chemical Materiel Project, U.S. Army Chemical Materials Agency

MR. LAURENCE GOTTSCHALK



COL. JOHN LEMONDES

Project Manager Chemical Stockpile Elimination,
U.S. Army Chemical Materials Agency

*Mr. Whyne was the CMA Director when the stockpile destruction mission was completed in January 2012.

The U.S. Army Chemical Materials Activity (CMA) headquarters (HQ) management team has always been located at the Edgewood Area of Aberdeen Proving Ground, Maryland. CMA has had many directors, program and project managers throughout the years, whose commitment to the Agency's mission to "enhance national security by storing and ultimately eliminating U.S. Chemical Warfare Materiel (CWM), and supporting CWM responses" has been unwavering.

Now that the Activity's stockpile destruction mission is complete, CMA HQ will focus on its remaining missions, which include responding to recovered CWM; safely storing the remaining chemical weapons stockpiles in Kentucky and Colorado; supporting the communities surrounding the Kentucky and Colorado stockpiles with emergency management planning and working with the treaty mission as the Army's Executive Agent.

PAST LEADERSHIP

COL. SAMPSON H. BASS, JR.

Program Manager for Demilitarization of Chemical Materiel, October 1972 - July 1975

BRIG. GEN. SAMPSON H. BASS, JR.

Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration, July 1975 – June 1976

COL. FRANK A. JONES, JR.

Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration, June 1976 – December 1978;

Project Manager for U.S. Army Toxic and Hazardous Materials Agency, December 1978 - September 1980

COL. JOHN D. SPENCE

Project Manager U.S. Army Toxic and Hazardous Materials Agency, September 1980 - June 1983

COL. PETER D. HIDALGO

Project Manager U.S. Army Toxic and Hazardous Materials Agency, June 1983 - February 1985

COL. FERNAND A. THOMASSY

Project Manager, U.S. Army Toxic and Hazardous Materials Agency, February 1985 - May 1986

BRIG. GEN. DAVID A. NYDAM

Program Manager for Chemical Munitions (Demilitarization and Binary), May 1986 - December 1988

BRIG. GEN. WALTER L. BUSBEE

Program Manager for Chemical Munitions (Demilitarization and Binary), January 1989 - March 1989;

 $Program\ Executive\ Officer-Program\ Manager\ for\ Chemical\ Demilitarization,\ March\ 1989-February\ 1990;$

Program Manager for Chemical Demilitarization, February 1990 – October 1992;

Program Manager, U.S. Army Chemical Material Destruction Agency, October 1992 - September 1994

COL. JAMES M. COVERSTONE

Program Manager, U. S. Army Chemical Material Destruction Agency, September 1994 – December 1994;

Program Manager, U.S. Army Chemical Demilitarization and Remediation Activity,

December 1994 – May 1995

MAJ. GEN. ROBERT D. ORTON

Program Manager, U.S. Army Chemical Demilitarization and Remediation Activity, May 1995 - October 1995:

Program Manager for Chemical Demilitarization, October 1995 - June 1997

MR. JAMES L. BACON

Program Manager for Chemical Demilitarization, July 1997 - April 2002

MR. DELBERT F. BUNCH

Deputy Program Manager for Chemical Demilitarization, June 2002 - February 2003

MR. MICHAEL A. PARKER

Acting Director, U.S. Army Chemical Materials Agency (Provisional), February 2003 – November 2003; Director U.S. Army Chemical Materials Agency, November 2003 – January 2007

MR. DALE A. ORMOND

Acting Director, U.S. Army Chemical Materials Agency, January 2007 - January 2008

MR. CONRAD F. WHYNE

Director, U.S. Army Chemical Materials Agency, January 2008 - February 2012

CHEMICAL DEMILITARIZATION PROGRAM (CDP) TIMELINE



1960S AND BEFORE | Chemical agents were developed in the United States at various sites as a response to WWI and WWII.



1979 Aerial view of the CAMDS in Utah, shortly after starting its research and development mission.



1987 | JACADS during systemization, or testing, of the plant equipment and processes.

1960s AND BEFORE

Edgewood Arsenal, Maryland, produced mustard and phosgene—new installations constructed in Huntsville, Alabama, Denver, Colorado, Pine Bluff, Arkansas, and Tooele, Utah, to store the agents.

After World War II, United States produced nerve agent GB at Rocky Mountain Arsenal near Denver, Colorado, and VX at Newport, Indiana.

1971

United States transferred chemical munitions from Okinawa, Japan, to Johnston Island—located about 800 miles from Hawaii.

1972

U.S. Army Materiel Command Program Manager for Demilitarization of Chemical Materiel formed at Picatinny Arsenal, near Dover, New Jersey.

1973

Program Manager for Demilitarization of Chemical Materiel is relocated to Edgewood Arsenal, Maryland.

1975

Program Manager for Demilitarization of Chemical Materiel changed to Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration.

1978

Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration changed to U.S. Army Toxic and Hazardous Materials Agency (USATHAMA).

1979

Army constructed and began operating Chemical Agent Munitions Disposal System (CAMDS)—a pilot incineration facility located at what is now Deseret Chemical Depot (DCD), Utah.

1985

Construction of a full-scale prototype demilitarization facility began on Johnston Island in the Pacific Ocean. Facility will be named Johnston Atoll Chemical Agent Disposal System (JACADS).

1986

Public Law 99-145 required safe destruction of the U.S. unitary chemical weapons stockpile. Stockpiles stored at Aberdeen, Maryland, Pine Bluff, Arkansas, Deseret, Utah, Umatilla, Oregon, Newport, Indiana, Anniston, Alabama, Blue Grass, Kentucky, Pueblo, Colorado, and on Johnston Island in the Pacific Ocean.

Program Manager for Chemical Munitions (Demilitarization and Binary) formed from part of USATHAMA.

1987

JACADS construction completed.

1988

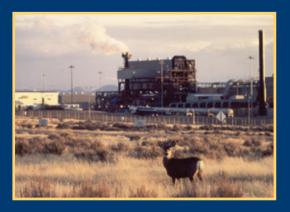
Chemical Stockpile Emergency Preparedness Program (CSEPP) established in response to Public Law 99-145.

1988-1990

Army destroyed BZ agent at Pine Bluff Arsenal (PBA), Arkansas.



1989 | Chemical demilitarization program leaders and VIPs break ground for the TOCDF in Utah.



1996 A mule deer, one of many varieties of wildlife in the area, standing in front of the operating TOCDF.



1999 | Construction activities at the ABCDF.

1989

Program Manager for Chemical Munitions (Demilitarization and Binary) changed to Program Executive Officer-Program Manager for Chemical Demilitarization.

Construction began on Tooele Chemical Agent Disposal Facility (TOCDF) at DCD, Utah.

1990

JACADS began destruction of the Johnston Island stockpile, six percent of Nation's original stockpile.

Program Executive Office-Program Manager for Chemical Demilitarization changed to Program Manager for Chemical Demilitarization (PMCD).

1992

U.S. Army Chemical Materiel Destruction Agency established, consolidated responsibility for the destruction of chemical materials into one office.

Complying with Public Law 102-484, the Non-Stockpile Chemical Materiel Project (NSCMP) was created to develop systems to safely assess, treat, and destroy five categories of chemical warfare materiel not part of declared stockpile.

1994

U.S. Army Chemical Materiel Destruction Agency changed to U.S. Army Chemical Demilitarization and Remediation Activity (CDRA); placed under U.S. Army Chemical and Biological Defense Command (CBDCOM).

Army established Alternative Technologies and Approaches Project to investigate alternatives to incineration technology at two bulk agent sites, Aberdeen Proving Ground (APG), and Newport Chemical Depot (NECD).

1995

CDRA separated from CBDCOM—renamed PMCD.

1996

TOCDF, with about 44 percent of Nation's original stockpile of nerve and blister agents, began destroying chemical weapons.

1997

United States ratified Chemical Weapons Convention (CWC), agreed to dispose of its unitary chemical weapons stockpile, binary chemical weapons, recovered chemical weapons and former chemical weapons production facilities.

Construction began on Anniston Chemical Agent Disposal Facility (ANCDF) at Anniston Army Depot (ANAD), Alabama, and Umatilla Chemical Agent Disposal Facility (UMCDF) at Umatilla Chemical Depot (UMCD), Oregon.

PMCD met CWC treaty requirement, destroyed one percent of U.S. chemical weapons stockpile.

NSCMP fielded the first Mobile Munitions Assessment System.

1999

Construction began on Aberdeen Chemical Agent Disposal Facility (ABCDF) at APG, Maryland.

NSCMP met CWC requirement by destroying "excess other" and "parity other" binary weapons components.

Construction began at Pine Bluff Chemical Agent Disposal Facility (PBCDF) at PBA, Arkansas.

2000

JACADS completes destruction of its chemical weapons stockpile.

Construction began on the Newport Chemical Agent Disposal Facility (NECDF) at NECD, Indiana.



2003 | Workers load nerve agent GB-filled M55 rockets into the destruction process line as ANCDF starts disposal operations.



2005 ABCDF workers send the last emptied mustard ton container into the Ton Container Cleanout Facility for complete cleaning and decontamination.

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2006 Former Newport VX Production Facility, Newport Chemical Depot, Indiana.

2001

NSCMP Rapid Response System (RRS) treated more than 700 Chemical Agent Identification Set (CAIS) items at DCD.

Responding to attacks on Sept. 11, 2001, the Army studied accelerating destruction operations.

CWC treaty requirement was met with destruction of 20 percent of U.S. chemical weapons stockpile.

NSCMP treated 10 recovered sarin-filled bomblets at Rocky Mountain Arsenal, Colorado, using the Explosive Destruction System (EDS) for the first time.

2002

Army announced plans to accelerate destruction of the chemical agent stockpiles at Aberdeen and Newport.

CWC treaty requirements were met with destruction of 100 percent of the original inventory of Category 3 munitions.

2003

PMCD merged with the stockpile storage mission within the U.S. Army Soldier and Biological Chemical Command

to form the U.S. Army Chemical Materials Agency (CMA). ANCDF began disposing of chemical weapons stored at ANAD—approximately seven percent of original U.S. stockpile.

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NSCMP began cleaning obsolete large steel bulk containers at the Pine Bluff Ton Container Decontamination Facility at PBA, Arkansas.

The United States met CWC treaty requirement by destroying 80 percent of former chemical weapons production facilities.

NSCMP's Single CAIS Access and Neutralization System (SCANS) treated first CAIS item at Fort McClellan, Alabama.

2004

UMCDF began disposing of chemical weapons stored at UMCD—approximately 12 percent of original U.S. stockpile.

NSCMP began testing Munitions Assessment and Processing System at Aberdeen.

2005

ABCDF destroyed all drained mustard agent from the APG stockpile.

TOCDF destroyed its millionth chemical agent munition at DCD.

NECDF began disposal operations of nerve agent VX stored in large steel bulk containers—approximately four percent of original U.S. stockpile.

PBCDF began disposal operations of the PBA chemical munitions and bulk containers—approximately 12 percent of original U.S. stockpile.

2006

Treaty inspectors with the Organisation for the Prohibition of Chemical Weapons verified complete destruction of ABCDF's hydrolysate at DuPont, marking the official 100 percent destruction of the APG stockpile.

Treaty inspectors verified destruction of the former chemical warfare production facility at NECD. NSCMP finished chemically neutralizing U.S. supply of precursor chemical agents DF and QL.



2008 | Operators show the last VX nerve agent-filled land mine from the ANCA stockpile as it is loaded into the destruction process at the ANCDF.

United States met the CWC treaty requirement by destroying 100 percent of former chemical weapons production facilities.

NSCMP Pine Bluff Explosive Destruction System (PBEDS) began treating more than 1,200 munitions at PBA.

2007

Army met CWC milestone—destroying 45 percent of U.S. chemical agent stockpile since Entry-into-Force.

Last VX nerve agent-filled spray tank in U.S. chemical weapons stockpile destroyed.

NSCMP met CWC 100 percent destruction of all binary chemical warfare materiel deadline.

2008

Last M55 rocket in CMA disposal mission destroyed; cumulative storage risk to public reduced by 94 percent.

NECDF completed bulk nerve agent VX disposal mission.

CMA destroyed all VX in disposal mission inventory when ANCDF destroyed final VX-filled land mine.



2010 NSCMP's EDS is used at PBA, Arkansas, to destroy the largest cache of non-stockpile munitions in the United States.

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2012 | Toxic material handlers load the last mustard agent-filled ton container into an on-site container for safe transport from DCD Area 10 to the TOCDF for disposal.

2009

CMA reached 60 percent destruction—more than 1.9 million—of munitions in original U.S. chemical weapons stockpile.

CAMDS at DCD, celebrated 30 years as the primary research, test, and development facility for the U.S. chemical weapons disposal program.

CMA celebrated the safe destruction of the two millionth munition since CWC Entry-into-Force.

2010

NSCMP completed PBEDS mission, and destroyed more than 1,200 munitions cached at PBA.

CMA reached 75 percent destruction of U.S. chemical weapons stockpile since CWC Entry-into-Force.

PBCDF safely completed chemical weapons destruction operations at PBA.

NSCMP completed three successful assessment and destruction missions at Redstone Arsenal, Alabama, Camp Sibert, Alabama, and Spring Valley, Washington, D.C., using the transportable EDS.

2011

CMA achieved destruction of 85 percent of the U.S. chemical agent stockpile since Entry-into-Force.

Pine Bluff Ton Container Decontamination Facility, operated by NSCMP, completed decontamination of 4,307 ton containers, recycling 6.5 million pounds of steel.

ANCDF completed destruction of the chemical weapons stockpile at ANAD, Alabama.

UMCDF completed destruction of the chemical weapons stockpile at UMCD, Oregon.

2012

TOCDF completed destruction of the chemical weapons stockpile at DCD.

CMA completed Chemical Stockpile Elimination mission destroying 89.75 percent (27,474 U.S. tons) of the Nation's chemical weapons stockpile stored at seven sites.

NON-STOCKPILE CHEMICAL MATERIEL PROJECT

As one of the U.S. Army Chemical Materials Agency's (CMA) missions, the Non-Stockpile Chemical Material Project (NSCMP) is responsible for managing the assessment and disposal of recovered chemical warfare material (RCWM) in a safe, environmentally-sound, and cost-effective manner in compliance with the Chemical Weapons Convention (CWC). The NSCMP team, comprised of engineers, project managers, chemists and subject-matter experts, leads the Nation in the development and use of advanced technology to treat RCWM.

The NSCMP, now the Recovered Chemical Materiel Directorate (RCMD), team continues to support CMA and the Army in responding to recovered chemical warfare materiel.

Key NSCMP milestones include:



2002

Destroyed all miscellaneous chemical warfare materiel treaty items, including both treaty and non-treaty items, such as unfilled munitions, support equipment, and devices designed for use with chemical weapons.



2006

Destroyed former chemical warfare production facilities located at Rocky Mountain Arsenal, Colorado; Muscle Shoals, Alabama; Newport Chemical Depot, Indiana; Aberdeen Proving Ground, Maryland; and Pine Bluff Arsenal (PBA), Arkansas.



2007

Safely completed destruction of the binary chemical weapons inventory.



2010

Operators at the Pine Bluff Explosive Destruction System, located at PBA, Arkansas, destroyed the last munition in its inventory, marking the destruction of all recovered non-stockpile materiel declared by the United States at Entry-into-Force of the CWC.



2011

Recycled more than 6.5 million pounds of steel through the safe decontamination of 4,307 ton containers that once held hazardous materials at the Pine Bluff Ton Container Decontamination Facility located at PBA, Arkansas.

CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM



Accident scenario during a CSEPP exercise at PBA, Arkansas.

When Congress mandated destruction of the chemical weapons stockpiles, it was important to protect the workforce, the communities and the environment. CMA conducted studies to help determine the need for local communities to improve existing emergency plans, training, equipment and facilities. This led to the creation of the Chemical Stockpile Emergency Preparedness Program (CSEPP) in 1988. CSEPP's purpose was to improve the emergency response capabilities in communities that surrounded the chemical stockpiles.

CSEPP teamed with the Army and the Federal Emergency Management Agency, also known as FEMA, as well as other federal, state and local agencies in the states where stockpiles were located to prepare communities for a variety of emergencies, including a chemical accident or incident. As a result, these communities now have:

- Upgraded Emergency Operations Centers for response to any emergency;
- Well-trained emergency responders, including police officers, firefighters and emergency medical teams; and
- Thoroughly tested emergency plans, procedures and equipment as a result of annual CSEPP exercises.

The safe destruction of the Nation's chemical weapons stockpiles has resulted in some of the best-prepared communities in the Nation. CSEPP's mission continues as it supports communities surrounding the stockpiles in Kentucky and Colorado.

STORAGE



Mustard agent-filled projectiles in a storage igloo or bunker at the Pueblo Chemical Depot, Colorado.

Safety is the cornerstone of all CMA missions—safety of our workforce, our communities, and our environment. Thorough job training and certification in the Army's Personnel Reliability Program is designed to ensure safety is maintained at all times.

While the Program Executive Office – Assembled Chemical Weapons Alternatives (ACWA) is responsible for the destruction of the chemical weapons in Kentucky and Colorado, the U.S. Army Chemical Materials Activity (CMA) retains the mission for safe and secure storage of those stockpiles. Kentucky's chemical weapons stockpile is comprised of 523 tons of nerve agents GB and VX and blister agent (HD); Colorado's stockpile contains approximately 2,611 tons of blister agents (HD and HT).

The chemical agents and munitions at both sites are housed in designated storage areas and specially designed earth-covered magazines, commonly referred to as storage igloos or bunkers, located at Blue Grass Army Depot, Kentucky, and at Pueblo Chemical Depot, Colorado. CMA maintains a National Inventory Control Point and National Maintenance Point to ensure the stockpile is maintained safely during its entire storage life.

TREATY



OPCW headquarters in The Hague, Netherlands.

When the United States, along with 86 other nations, originally signed and ratified the Chemical Weapons Convention (CWC) treaty in 1997, the agreement included the following:

- Prohibited the development, production, stockpile and use of chemical weapons;
- Required each signatory nation possessing chemical weapons to destroy them in an environmentally safe manner; and
- Forbade the disposal of chemical weapons by open-pit burning, land burial or dumping in any body of water.

As of 2015, 192 member states have ratified the CWC. The Organisation for the Prohibition of Chemical Weapons (OPCW), an international organization in The Hague, Netherlands, oversees CWC implementation.

In order to verify U.S. compliance with the treaty, inspection teams from the OPCW were housed near and had offices at each disposal site. CMA maintained transparency with OPCW inspectors, ensuring that the chemical munitions were stored and destroyed in accordance with all treaty requirements.

CMA continues work with its international stakeholders at its storage missions in Kentucky and Colorado until those chemical weapons stockpiles are completely destroyed.

"Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results." - ANDREW CARNEGIE

CMA's workforce attained uncommon results. The agency bore the weighty responsibility of destroying one of the Nation's deadliest types of weapons—chemical agents—and the workforce dedicated their professional careers to the safety of their families, communities and country. CMA worked hard, CMA worked smart, but most importantly, CMA worked together safely.

Teamwork is the reason CMA made chemical weapons history.

Many thanks to state regulators, local and national elected officials, community groups and other partners who shared CMA's vision and determination to safely destroy the Nation's chemical weapons stockpile. Community support around the country was an integral part of the program's success at the sites and as a program:

PARTNERS

20th Support Command

22nd Chemical Battalion

Alabama Department of Environmental Management

Argonne National Laboratory

Arkansas Department of Environmental Quality

Assembled Chemical Weapons Alternatives

Chemical Weapons Convention

Colorado Department of Public Health & Environment

Confederated Tribes of the Umatilla Indian Reservation

Defense Information Systems Agency

Defense Threat Reduction Agency

Department of Defense Explosives Safety Board

Department of Energy

Edgewood Chemical Biological Center

EPA Region 9 (Pacific Southwest)

Federal Emergency Management Agency

Idaho National Laboratory

Indiana Department of Environmental Management

Kentucky Department for Environmental Protection

Maryland Department of Environment

National Academy of Sciences

National Research Council

Occupational Safety and Health Administration

Oregon Environmental Quality Commission

Organisation for the Prohibition of Chemical Weapons

ILS Air Force

U.S. Army Center for Health Promotion and Preventive Medicine

U.S. Army Contracting Command

U.S. Army Corps of Engineers

U.S. Army Materiel Systems Analysis Activity

U.S. Army Public Health Command

U.S. Army Research, Development and Engineering Command

U.S. Centers for Disease Control and Prevention

U.S. Environmental Protection Agency

U.S. Fish & Wildlife Service

Sandia National Laboratory

Utah Department of Environmental Quality

SYSTEM CONTRACTORS

Bechtel

EG&G Defense Materials Inc.

Parsons Infrastructure & Technology

Raytheon Corporation

URS Corporation

Washington Defense Group

Washington Demilitarization Company

Westinghouse Anniston

SUPPORT CONTRACTORS

A.D. Little

Alion Science and Technology Corporation

Artech, Inc.

BAI Inc

Battelle Memorial Institute

Booz Allen Hamilton

CH2M Hill

Cooper Zietz Engineers, Inc.

CRGT

DuPont

EA Engineering

Earth Tech Inc.

General Physics

Hendrix Enterprises

Innovative Emergency Management

Mason and Hanger

Mitretek/Noblis

Northrop Grumman Information Systems

Oak Ridge National Labs

Oasis in the Workplace

Pueblo Diversified Industries, Inc.

RCMI

Science Applications International Corporation

Shaw Environmental

STEM International

Teledyne Brown Engineering

Tennessee Valley Authority

URS Coleman

UXB International

V.G. Associates

Veolia Environmental Services

Vista Engineering Technologies

SUB-CONTRACTORS

A. Bright Idea

Alpha Management Solutions

Altus Engineering

Horne International

JACOBS Engineering

MRI Global

Science and Technology Corporation

Southwest Research Institute

Tetra Tech





